

AMENDMENTS TO THE CLAIMS

Claim 1 (currently amended). A radiation protection material for use in radiation protection gloves comprising: at least one layer of a polymeric material of rubber having radiation absorbing particles and a cellulose derivative distributed therein, the radiation absorbing particles attenuating the intensity of scattered radiation; and at least one layer of a polymer coating on an inner surface thereof that reduces a surface friction of the inner surface of the radiation protection material with respect to hands, the radiation absorbing particles being present in the sheet in an amount sufficient for a sheet of the material having a thickness of about 0.3 mm to block at least about 30 % of scattered secondary X-radiation at an intensity of about 60 kV and at least about 20% of scattered secondary X-radiation at an intensity of about 100 kV.

Claim 2 (previously presented). The radiation protection material of claim 1 wherein the at least one layer of polymeric material comprises about 20 to 40% by dry weight of rubber and about 60 to 80% by dry weight of radiation absorbing particles.

Claim 3 (original). The radiation protection material of claim 2 wherein the cellulose derivative comprises about 0.1 to 0.4% by dry weight.

Claim 4 (original). The radiation protection of claim 1 wherein the at least one layer of polymeric material comprises about 33% by dry weight of rubber and about 67% by dry weight of radiation absorbing particles.

Claim 5 (original). The radiation protection material of claim 4 wherein the cellulose derivative comprises about 0.25% by dry weight.

Claim 6 (original). The radiation protection material of claim 4 wherein the cellulose derivative comprises a water-soluble cellulose ether.

Claim 7 (currently amended). The radiation protection material of claim [[4]] 6 wherein the water-soluble cellulose ether comprises methylcellulose.

Claim 8 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 100 % by weight of bismuth oxide particles.

Claim 9 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 100 % by weight of tungsten oxide particles.

Claim 10 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 100 % by weight of tin oxide particles.

Claim 11 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 100 % by weight of antimony-tin oxide particles.

Claim 12 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 60 to 90 % by weight metallic tin particles and about 10 to 40 % by weight of bismuth oxide particles.

Claim 13 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 60 to 90 % by weight of tin oxide particles and about 10 to 40 % by weight of tungsten oxide particles.

Claim 14 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 60 to 90 % by weight of antimony-tin oxide particles and about 10 to 40 % by weight of tungsten oxide particles.

Claim 15 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 40 to 60 % by weight of bismuth oxide particles and about 40 to 60 % by weight of tungsten oxide particles.

Claim 16 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 40 to 60 % by weight of tin oxide, about 20 to 30 % by weight of tungsten oxide particles, and about 20 to 30 % by weight of bismuth oxide particles.

Claim 17 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 40 to 60 % by weight of antimony-tin oxide particles, about 20 to 30 % by weight of tungsten oxide particles, and about 20 to 30 % by weight of bismuth oxide particles.

Claim 18 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 60 to 90 % by weight of tin oxide particles and about 10 to 40 % by weight of bismuth oxide particles.

Claim 19 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles comprise about 60 to 90 % by weight of antimony-tin oxide particles and about 10 to 40 % of bismuth oxide particle.

Claim 20 (original). The radiation material of claim 4 wherein the at least one layer of polymeric material is formed by dipping a pattern into the material and vulcanising the material on the pattern.

Claim 21- (cancelled).

Claim 22 (previously presented). The radiation protection material of claim 1 wherein the polymeric material of rubber is selected from the group consisting of polyisoprene rubber, polybutadiene rubber, styrene-butadiene rubber, nitrile rubber, butyl rubber, ethylene-propylene rubber, neoprene rubber, silicone rubber, polysulfide rubber and urethane rubber.

Claim 23 (original). The radiation protection material of claim 22 wherein the polyisoprene rubber is comprised of a natural rubber latex.

Claim 24 (original). The radiation protection material of claim 23 wherein the natural rubber latex comprises about 60% by dry weight of rubber and about 0.4 to 0.8% by weight of ammonia prior to a vulcanisation of the material.

Claim 25 (previously presented). The radiation protection material of claim 23 wherein the natural rubber latex is a prevulcanised natural rubber latex having a pH-value in the range of about 10 to 11.

Claim 26 (original). The radiation protection material of claim 4 wherein the at least one layer of polymeric material comprises at least two layers.

Claim 27 (cancelled).

Claim 28 (previously presented). The radiation protection material of claim 1 wherein the at least one layer of polymer coating comprises a copolymer of an acrylic acid and an acrylic acid ester.

Claim 29 (previously presented). The radiation protection material of claim 1 further comprising at least one layer of a cationic surfactant to improve the lubricity and donnability of the gloves with respect to damp hands.

Claim 30 (original). The radiation protection material of claim 4 further comprising at least one layer of a polymer coating on an outer surface of the at least one layer of material that reduces a stickiness of the surface.

Claim 31 (original). The radiation protection material of claim 30 wherein the at least one layer of polymer coating reduces a surface drag of the outer surface.

Claim 32 (original). The radiation protection material of claim 30 wherein the at least one layer of polymer coating material comprises a polyacrylate.

Claim 33 (original). The radiation protection material of claim 4 wherein the radiation absorbing particles have a particle size of less than about 10 μm .

Claim 34 (original). The radiation protection material of claim 3 wherein the radiation absorbing particles have a particle size of less than about 6 μm .

Claim 35 (original). The radiation protection material of claim 3 wherein the radiation absorbing particles have a particle size of less than about 2 μm .